

BioLineRx's Early Development Program Awarded a prestigious R&D Grant from the Canada-Israel Research & Development Foundation (CIIRDF)

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Jerusalem, Israel, October 15, 2009 - BioLineRx Ltd. (TASE: BLRX), a clinical stage drug development company, today announced that its Early Development Program (EDP) has been awarded a prestigious R&D grant from the Canada-Israel Research & Development Foundation (CIIRDF). The grant was awarded to BioLineRx and its Canadian development partner, Matrix Pharma Inc., for the development of novel anti-EGFR compounds aimed at the treatment of lung and epithelial cancers. BioLineRx's Early Development Program provides funding for early stage research and development of innovative therapeutics. The EDP is funded by a \$6 million grant from the Pan Atlantic Group (the Albert Friedberg Family) and BioLineRx. This unique program currently has a robust pipeline of over 10 projects addressing vital therapeutic indications including cancer, autoimmune and infectious diseases, diabetes and psychiatric disorders. Development stages range from discovery to in vivo feasibility. "It is an honor to receive this grant from a prestigious institution like the CIIRDF," said Morris C. Laster, MD, CEO of BioLineRx. "The collaboration will help propel the development of a new and highly effective treatment for cancer sufferers. We look forward to the success of this project as well as other compounds in the deep EDP pipeline."

The CIIRDF promotes R&D partnerships between Israeli and Canadian technology companies through the provision of funding and assistance in the formation of partnerships. The CIIRDF evaluates R&D projects in various technology areas that are of shared importance to Canada and Israel, and grants up to \$800,000 (CDN) in matching funds towards their completion.

About BioLineRx

BioLineRx, a clinical stage drug development company traded on the Tel Aviv Stock Exchange (TASE: BLRX), is dedicated to building a robust pipeline of promising therapeutics for unmet medical needs. The Company's lead programs include BL-1020 for the treatment of schizophrenia, has just completed Phase 2b trial; and BL-1040 for the treatment of damaged heart tissue post-myocardial infarction, currently in a Phase 1-2 study. BL-1040 has been out-licensed to Ikaria. Additional products under development include compounds for the treatment of cancer and CNS, cardiovascular, infectious and autoimmune diseases.

BioLineRx advances projects from early stage discovery and lead generation to advanced clinical trials. BioLineRx partners with researchers, universities and biotech companies to further the development of promising compounds. The Company was founded in 2003 by leaders in the Israeli life science arena including Teva Pharmaceuticals Ltd., venture capital firms Giza Venture Capital and Pitango Venture Capital, and Hadasit, the technology transfer company of Hadassah Hospital and the Jerusalem Development Authority. For more information, please visit www.biolinerx.com.

This press release contains "forward-looking statements" that involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms including "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," "hope,", "look forward" and similar expressions intended to identify forward-looking statements. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. You should not put undue reliance on any forward-looking statements. Unless we are required to do so under applicable laws, we do not intend to update or revise any forward-looking statements.

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